

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, listing, of claims in the specification.

LISTING OF CLAIMS:

Claim 1 (original) A biodegradable and bioactive glass-ceramic fabricated from a composition consisting of calcium oxide (CaO), silica (SiO.sub.2), boron oxide (B.sub.2O.sub.3), magnesium oxide (MgO), calcium fluoride (CaF.sub.2) and phosphorus pentoxide (P.sub.2O.sub.5).

Claim 2 (original) The biodegradable and bioactive glass-ceramic according to claim 1, wherein the composition comprises 41.40.about.45.75% by weight of calcium oxide (CaO), 35.0.about.47.62% by weight of silica (SiO.sub.2), 1.62.about.14.58% by weight of phosphorus pentoxide (P.sub.2O.sub.5), 0.50.about.14.58% by weight of boron oxide (B.sub.2O.sub.3), 0.46.about.4.14% by weight of magnesium oxide (MgO) and 0.05.about.0.45% by weight of calcium fluoride (CaF.sub.2).

Claim 3 (original) A biodegradable and bioactive glass-ceramic fabricated by mixing a first glass consisting of 41.03.about.45.86% by weight of calcium oxide (CaO), 43.97.about.49.14% by weight of silica (SiO.sub.2) and 5.about.15% by weight of boron oxide (B.sub.2O.sub.3), and a second glass consisting of 44.7 parts by weight of calcium oxide (CaO), 44.7 parts by weight of magnesium oxide (MgO), 34.0 parts by weight of silica (SiO.sub.2), 16.2 parts by weight of phosphorus pentoxide (P.sub.2O.sub.5) and 0.5 parts by weight of calcium fluoride (CaF.sub.2) wherein the mixing ratio of the first glass to the second glass is between 90:10 and 10:90 on a weight basis.

Claim 4 (canceled) A method for fabricating a biodegradable and bioactive glass-ceramic, comprising: preparing a first glass consisting of 41.03.about.45.86% by weight of calcium oxide (CaO), 43.97.about.49.14% by weight of silica (SiO.sub.2) and 5.about.15% by weight of boron oxide (B.sub.2O.sub.3), and a second glass consisting of 44.7 parts by weight of calcium oxide (CaO), 44.7 parts by weight of magnesium oxide (MgO), 34.0 parts by weight of silica (SiO.sub.2), 16.2 parts by weight of phosphorus pentoxide (P.sub.2O.sub.5) and 0.5 parts by weight of calcium fluoride (CaF.sub.2), respectively; pulverizing the first glass and the second glass into finely-divided powders having a particle diameter of 1.about.10 .mu.m, respectively; mixing the

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first glass powder and the second glass powder to obtain a glass powder mixture, the mixing ratio of the first glass to the second glass being between 90:10 and 10:90 on a weight basis; molding the glass powder mixture using a press or into a porous body; and sintering the molded body at 700.about.900.degree. C.

Claim 5 (canceled) The method for fabricating a biodegradable and bioactive glass-ceramic according to claim 4, wherein the mixing ratio is controlled so as to control the biodegradation rate.